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Does Team Training Make a Difference?
A Comparison of Early MEAO and AMTG Voices on Pre-Deployment Training and Team Issues - Sub-task Report for the Human Dimensions of NCW

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ABSTRACT

This document reports on the analysis of interviews with the Al Muthanna Task Group (AMTG), a battlegroup that formed Australia's main ground force contribution to the Multinational force in Iraq over 2005-2008. The report focuses on issues relating to training, pre-deployment preparation and teaming aspects of deployed units. AMTG findings in relation to those issues are compared with an earlier interview program which involved a representative sample of ADF (Australian Defence Force) personnel who had deployed to the Middle East Area of Operations over the period 2003-2005. The results of this analysis indicate that while some difficulties were not as prevalent, some had endured, and others had emerged. Enduring themes pertain to mission specific training, cultural awareness, and the timing for assembling of teams. New issues relate to the perceived reputation of the ADF and differences in expectations and attitudes between those that regularly operated on patrol and those that remained within the base.

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Executive Summary

The research presented in this report represents the analysis of a study of the Al-Muthanna Task Group (AMTG) who were deployed in Iraq during 2005-2006. The interview program took place in August 2007. Unlike the ADF's early deployments in the MEAO in 2003-2005, later deployments to Southern Iraq were trained in pre-formed units prior to deployment. It was, therefore, necessary to determine whether this team training mitigated specific problems that had been identified in the earlier interviews with returnees from the MEAO. Although the topics that were covered during the AMTG interview program correspond to these covered in the early MEAO interviews, this report focuses on the issues relating to preparation for deployment and related teaming issues. The findings are compared with those analysed from the early MEAO interview program and the enduring human dimension themes and lessons from the MEAO are highlighted.

There are some differences in the interview sample between the two data sets. While the early MEAO interview program involved a sample of a hundred personnel representing all three Services, the AMTG interviews involved only thirty Army personnel. Further, in the early MEAO interviews middle to high ranking commissioned officers (MAJ to BRIG and equivalent) comprised the majority of the sample (79%), in AMTG interviews commissioned officers constituted only 21% of the sample with the highest rank being a Major. Also, the range of duties performed by the early MEAO interviewees was much wider than those conducted by the AMTG, which were predominantly security and training responsibilities.

The research findings suggest that training in pre-formed teams prior to deployment had mitigated some of the teaming issues reported from the earlier interview data set. The personal knowledge each team member had acquired of other members of the team was considered to be an important factor in teams conducting their mission effectively. This view was not a prevalent one in the earlier interviews where teams were formed more on arrival in theatre and personnel did not have the benefit of knowing each other. In regard to preparation for deployment, while the concerns that had dominated the earlier set of interviews did not appear to be prevalent in the AMTG interview data, other issues emerged. These issues affected warfighters' morale and major annoyances included: the duration of preparation training and the repetition of generic training for those that had done previous deployments. Interviewees pointed out the pivotal role played by the Combat Training Centre in setting up mission rehearsal exercises and facilitating whole battle group reflection and learning.

The enduring issues in relation to pre-deployment preparation that require assessment are: content, coverage, and specificity of pre-deployment to include legal, cultural, and media issues; balance between conventional warfare and mission specific training as well as between generic and specific training; need to build on previous experience, and not to duplicate it; need for more involvement of people who have returned from deployment; and the overall length of pre-deployment training. In particular, the need for more in-depth cultural awareness of both host nation and other coalition militaries to be able to recognise and understand the effects of culture on people's values and behaviours.

Two new issues emerged from the AMTG analysis that appeared to have an impact on troops' morale. One is the perceived negative reputation of the Australian soldiers by the coalition counterparts and by the Australian soldiers of themselves. The other issue is the level of, and differences in, expectations and attitudes between those that regularly operated outside a firm base ('outside the wire') and those that remained within ('inside the wire'). Both of those may be medium to long-term post-deployment issues requiring further investigation.

The following recommendations and areas for further research were identified:

- The nature of training and mission rehearsal exercises (MRE) should be examined so that they address the different roles that each individual soldier is likely to assume during deployments. This training should equip individual personnel with the skills and attributes required for higher duties and leadership roles.

- The network-centric paradigm necessitates a different approach to training and deployment preparation for teams who need to build trust and co-operate via the mediating technologies used for networked communication. While CONOPS for network-centric operations are being developed, concurrent research should be carried out into teaming issues in network-centric configurations. These different configurations will necessitate different understandings of teaming.

- It is recommended that an analysis of the full range of topics covered in the AMTG interview program be carried out and the results be compared with those of the early MEAO interview program to identify areas requiring attention and where further research may be needed.

- It is recommended that a study on preparation and training at the collective level be carried out to determine what is considered to be 'good practice' for networked joint deployment readiness for a range of possible future operations.

Authors

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Contents

1. Introduction

The research reported in this document is an extension of, and is closely related to, DSTO Task STR 03/242 *The Human Dimension of Future Warfighting* (HDoFW)[1] which included an interview program with a representative sample of Australian Defence Force personnel with Middle East Area of Operations (MEAO) experience. Subsequently, as part of Task CDE 07/031[2] a research program was undertaken by the Human Dimension Concepts Team (HDCT) of Joint Operations Division, that included a study of warfighters' perceptions of contemporary and future warfighting issues. The second interview program involved a sample from the Al Muthanna Task Group (AMTG), the battlegroup that formed Australia's main ground force contribution to the multinational force in Iraq over 2005-2008. While the same methodology and theoretical framework used for the former interview program was also applied to the latter interview program, there are some differences pertaining to the nature and size of the sample and to the type and range of duties interviewees performed while on deployment. These issues are discussed in more detail in Sections 2 and 4 of this report. This research task was initially intended to run three years, however, the timeline and staff resources for this task were considerably reduced and, therefore, the HDCT was not able to complete as comprehensive an analysis of the interview data as was originally intended.

Unlike the Australian Defence Force's (ADF) early deployments in the MEAO in 2003-2004, later deployments to Southern Iraq have been trained in pre-formed units prior to deployment. It was, therefore, necessary to determine whether this team training mitigated specific problems that had been identified in the earlier interviews with returnees from the MEAO[3]. While the spectrum of interview topics covered during the second interview program was essentially the same as the early MEAO, this report documents the analysis of interviews pertaining to preparation for deployment and team issues arising from this. The following research questions are addressed in this report:

1. Did the AMTG training together as a team before deployment mitigate against some of the preparation and teaming issues identified in the earlier Interview Program?

2. What are the enduring human dimension themes and lessons from the MEAO?

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[1]   Task STR 03/242 began in 2002 with the aim of providing a much needed analysis of what contemporary trends in warfighting may mean for the ADF. The Task comprised three interrelated pieces of research. The first was a review of the literature concerning NCW and future warfighting. The second was a series of in-depth interviews with ADF personnel returned from deployment to the MEAO since the Coalition invasion of Iraq in March 2003 (Warne et al, 2004). The third was the development of the Go*Team software.

[2]   Sub-Requirement CDE 07/0051 Human Dimensions of NCW (and, before that, Task STR 06/117 Future Force Enablers: The Human Dimension). This research was undertaken as part of the Sub-Requirement CDE 07/031 Human Dimensions of NCW Task (before that, Task STR 06/117 Future Force Enablers: The Human Dimension). This report is also an extension of Task STR 03/242 The Human Dimension of Future Warfighting (HDoFW).

[3]   These earlier interviews were conducted as part of the Human Dimension of Future Warfighting Task. The analysis of the interview data is in the final report on the Task: HDoFW Team (2007) *The Transition from Network-Centric Warfare to Networker-Centric Warfare: Outcomes of the Human Dimension of Future Warfighting Task* (Restricted Access) .DSTO Report DSTO-CR-2007-0311, Defence Systems Analysis Division, Defence Science and Technology Organisation, Department of Defence, Edinburgh, S.A.

Although the analysis of the interview data reported in this document relates to the above questions, the overall outcomes of this research input into the design of the Human Dimension Model of Warfighters Perceptions of Network Centric Warfare (WPoNCW). The WPoNCW Model, and other outcomes of the task, have been reported on separately (see Hasan & Warne, 2008 and Pascoe et al, 2008).

In Section 2, the research methodology is discussed together with background information on issues that emerged from the early MEAO interview program that are of relevance to this report. In Section 3, the research findings are presented. Section 4 comprises a comparison of the two interview programs together with the enduring themes and new factors that have emerged. The concluding remarks are made in Section 5, and recommendations and further research appear in Section 6.

1. Research Framework

1.1 Background

The interview program with the early MEAO interviewees encompassed a wide range of issues such as: preparation for deployment; command and control; working with the Americans; jointness; networker centric warfare; and context, communication and signs – issues around language, technology and contextuality (HDoFW, 2007).

The findings from that interview program which are of relevance to this report deal with preparation for deployment and related team issues, as follows:

- Whilst many of the interviewees spoke positively of the type of training received, they pointed out that it was lacking mission specific aspects and sometimes they felt ill prepared for what was ahead.

- Previous operational experience, participation in exchange programs and/or multinational exercises were regarded as the most valuable preparation for deployment, outweighing formal training courses.

- A good handover was considered important as it provided a means whereby people obtain instant feedback, are introduced to informal networks, and feel more confident about their posting. Suggestions about duration of a handover varied depending on the complexities of a posting but even the shortest face-to-face handover was considered better than no handover at all.

- Generally, people utilised informal networks extensively to obtain deployment information. Informal networking was seen by many of the study participants as a conscious, and valuable, alternative to what was perceived as obstructive or protracted bureaucracy or processes.

- The amount of information disseminated prior to deployment, as well as the notice of deployment, varied considerably. Most interviewees pointed out the importance of having enough time to organise personal affairs before being deployed and also having reasonably detailed information about their role and posting.

- Although not prevalent, knowing team members and having worked with them previously was seen as important.

- Trust in team-members' skills and abilities was considered to be vitally important. Trust was seen as the glue that kept human networks and interconnections aligned and was also seen as the underlying foundation for collaboration.

- The need to carefully plan deployments, i.e. for those with prior operational experience and those with no experience at all, for various stages of an operation was seen as crucial.

- Interoperability between coalition partners was affected more by human rather than technological issues, i.e. secrecy and cultural differences in terms of doctrine and command philosophy.

The analysis of the early MEAO interview data revealed the complexity and depth of the issues involved in operating in an environment characterised by high connectivity, proliferation of information, varying tempo, interdependence, and uncertainty. One of the conclusions drawn from the interview data was the need to look into the context and content of pre-deployment preparation and training and to better understand people's motivation for sharing within and across teams.

1.2 Methodology

As in the previous HDoFW research program, a qualitative methodology was used to answer the research questions. Semi-structured interviews were conducted with a fairly open framework which allowed for focused, but conversational, communication. Using a semi structured interviewing method enabled interviewers to ask some spontaneous questions and to be more sensitive to participants needs to express themselves while also securing a degree of standardisation of questions so that the same topics were covered in both sets of interviews.

1.2.1 Interview Program

The purpose of the interview program[4] was to compare the findings with the outcomes from the HDoFW task, thus the topics covered were essentially the same as those used in the HDoFW task interview program. These interview topics corresponded to the dominant themes that emerged from the literature review (Warne et al, 2004; HDoFW, 2007; Section 2.1) and are:

- pre-deployment preparation and training
- duties whilst deployed
- decision-making processes
- C2 arrangements and processes

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[4] Prior to commencing the interview program, the Human Dimension Concept Team applied for and received approval from the ethics committee, ADHREC (Australian Defence Human Research Ethics Committee), to conduct this research. In line with the guidelines, all interviewees provided their informed consent and were advised about the ethical principles governing the research, i.e. confidentiality and anonymity, recording of interviews, the use of data obtained, and the provision of contact information for further debriefing or counselling

- cooperation amongst Services, nations, and other agencies
- information gathering and sharing
- formal and informal communication flows
- important skills, competencies and lessons learned.

While care was taken to cover all the above topics during the AMTG interview program, due to the specific request from DPE, special emphasis was placed on issues relating to pre-deployment training and teaming.

Throughout the research task, the HDCT kept abreast of news bulletins and releases by the Centre for Army Lessons (CAL) on observations and insights from Army operations, particularly those pertaining to pre-deployment and training[5].

1.2.2 Interview Participants

The ATMG interviews were conducted over the period 20-31 August 2007 and involved thirty personnel from the following units:
- 2/14 Light Horse Regiment (Queensland Mounted Infantry)
- 1st Signals Regiment
- 3 Combat Services Support Battalion
- 4 Field Regiment
- 2 Cavalry Regiment
- Headquarters 2 Division

While the 2nd Royal Australian Regiment was also identified as a possible source of interview subjects, it was in the final phases of its deployment preparation including pre-embarkation leave and, therefore, was unavailable for this activity.

As depicted in Table 2.2.2, forty percent of the interviewees were commissioned officers with the remaining 60% being other ranks (43% non-commissioned officers (NCO), and 17% PTE/TPR/SIG) and Females comprising 10% of the sample.

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[5]   At one stage, an HDCT researcher and CAL analysts jointly conducted interviews with personnel who took part in the humanitarian operation Sumatra Assist (SA). One of the reports compiled by CAL of particular relevance to the scope of this report is *The Pre-Deployment Training (PDT) Insights Report*, which presents an analysis of insights captured from a variety of theatres. These theatres include the Middle East (Afghanistan and Iraq) and the Asia-Pacific region (Timor-Leste and the Solomon Islands). Additional observations have also been captured from the Combat Training Centre in Townsville

Table 2.2.2   AMTG interview subjects by rank and gender

Unit/gender　　Rank	2/14 LHR		1 SIG REGT	3 CSSB		4 FD REGT	2 CAV REGT	HQ 2 DIV	TOTAL
	M	F	M	M	F	M	M	M	
MAJ	1							2	3
CAPT	4		1		1		1		7
LT			1				1		2
WO1					1				1
WO2				2					2
SGT		1		1		1	2		5
CPL/BDR			1				3		4
LCPL/LBDR							1		1
PTE/TPR/SIG			1				4		5
TOTAL	5	1	4	3	2	1	12	2	**30**

1.2.3   Procedure

The majority of interviews were recorded on minidisk, with a few summarised by hand. Recorded interviews were transcribed into electronic format and entered into N'Vivo, a database for qualitative analysis. All interviews in N'Vivo were de-identified to ensure anonymity. Sections of the transcripts that referred to particular issues were coded within the N'Vivo database according to previously predetermined categories or 'code terms'. If an issue emerged and was not adequately represented by the existing code terms, new codes were agreed upon by all members of the research team, and added to the database for future coding. The data from the interviews could then be examined according to these code terms. To mitigate against subjectivity of coding that could affect specificity and exhaustivity of retrieval, the interviews were coded by two HDCT members. In addition to analysis using N'Vivo, the interview data was also analysed by two independent analysts, Amanda McIntosh[6] and Dr Henry Linger[7]. This analysis involved reading all de-identified interviews and noting the emerging themes. The reports on the emerging themes from this analysis are included in Appendix A. The findings of the study described below represent a synthesis of the analysis by means of N'Vivo and that of the independent analysts.

2. Research Findings

In this section, the findings from the interview program, in regard to pre-deployment preparation and training and related teaming issues are discussed. As far as possible, these findings are presented under similar groupings to those used for reporting the early MEAO interviews (HDoFW, 2007), however in order to fully address the research questions, findings

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[6] Ms Amanda McIntosh is a DSTO analyst with Joint Operation Division
[7] Dr Henry Linger is an academic at Monash University and has a long history of research collaboration with DSTO, particularly with the Human Dimension Concept Team.

on teaming issues are also included. In Section 3.1, issues related to deployment preparation are discussed, including previous deployment experience, handovers and the role of informal networks, skills and team composition, and lessons learned. In Section 3.2, outcomes of the analysis on teaming effectiveness issues are discussed and the summary of the findings is provided in Section 3.3.

2.1   Preparation for Deployment

Since the type and quality of pre-deployment training often determines how quickly an individual 'fits' into a new role, the interviews explored this aspect extensively. Interviewees were asked a number of questions relating to how adequately they felt prepared for deployment, the perceived quality and length of this training, and what the crucial aspects of this preparation were that stood them in good stead for the duties ahead. Generally speaking, interviewees were positive about the quality of training and preparation they received. However, in some cases, interviewees felt that training and preparation could be better tailored. The following sub-sections represent the primary themes from the analysis of the AMTG interviews.

2.1.1   Previous Operational Experience

Many AMTG personnel interviewed had been on more than one deployment to Iraq. One of their biggest concerns, as expressed by many interviewees, was that some units or individuals who had been on several deployments, and consequently had good general awareness, were still receiving the same three months of training from Deployed Forces Support Unit (DFSU). This repetition of generic training was seen as contributing to the lengthening of the overall time away from home, and frustrating people without adding any new insights.

> *…didn't change much from - pretty much in that three month -, that 10 week period was no different to the first deployment.*

> *If you've got a squadron size element and 90 per cent of them have been before, then you should be able to, in my opinion, slip straight into your pre-deployment training with your briefs and current up-to-date situation and then do … your individual training … to make sure that you're medically and AIRN compliant, and then you can crack on. But to go weeks and weeks and weeks out before you're deploying, I think - not only it affects the member - the soldier - because he's doing it all over again, it's affecting the family as well. …normally it's a six or seven month deployment, a couple of months out and you add that on as well so you're looking at nine, ten months and some of the families here have been through it three times.*

This view on the redundancy of some generic training for those who had already been on several deployments was not only emphasised by the people who were subjected to this but also by their commanders, as depicted by this quote:

> *I would be more than confident now to take the soldiers that we've already taken over there and deploy back there again tomorrow. I don't feel that any number of weeks of exercises and lead-up*

training would help. If anything, it would probably just upset them more. It's a basic, "Yes, we understand that you've been before but we're going to put you through it all again". It seems that we sort of lack the progression in, "Okay, let's take on board what they've done before and we'll grow from that". It always seems to be, "We'll take you back to basics and start again". And for the majority of the unit, they don't need to go all the way back.

2.1.2 Handovers and the Role of Informal Networks

Most interviewees claimed that spending time with the person they were replacing was a valuable form of preparation. However the duration of formal handovers was variable, as the following quotes illustrate:

I was there for a handover period of roughly seven days… probably a bit too long. We got that seven-day period. Most other people got a day, a day-and-a-half sort of handover. And, once again, that was probably quite adequate for what they needed.

I briefed them quite heavily before they went down and we also conducted a handover period each time there was a rotation. So three or four days prior to the rotation occurring, the incoming would go down. So there'd be an extra person down there. I would go down at the end of that three or four day period to confirm that the guy who was coming in knew exactly what was required of him. Then I would rotate the previous one out.

…the handover I got with the personnel I was replacing consisted of about a 30-minute talk in Kuwait. He was going out and I was going in."

It was often the informal handover that was deemed to be the most valuable, for instance:

I went over on the advance party and was able to get in contact with who I was replacing. So I basically jumped in with him and conducted a few patrols with him, was able to check out his local knowledge, milk him for information, that sort of stuff. The ability to do that was huge - to have that knowledge of him sitting there, driving around with him and asking him questions about the place just gave me a huge leap over the guys. For instance, when they replaced me, I basically pull out a map and said "This is where you can go, where you can't go, where you shouldn't go", and gave him a written brief of the best information I could pass on to him.

People form informal networks for a variety of reasons. Informal organisation or self organisation is unavoidable and the emergent informal groups, rather than strict adherence to formal chains of command and policies, contributes to innovation, knowledge sharing, and often effectively accomplishes work in organisations (Cross et al 2004; Ehin, 2004). The interview data clearly indicate that, in addition to formal training and formal information dissemination, people extensively engaged informal networks for finding out more about their deployment.

There were people digging around trying to find out extra information through the unofficial sort of a network, and guys had spoken to [others] who'd initially deployed on AMTG and got some sort of information…

Those who have been previously deployed served as, and proved to be, a great source of information for new contingents. It is through this social learning[8] that people assimilate information better and learning is more effective. In fact, it was suggested that those returning from deployment should be actively involved in pre-deployment preparation as members of a training team:

> …training team coming over and actually teaching us and saying, "Look, this is what you have to do and this is what you will be doing". And I think that's when the realism kicked in and the actual true sense of what we should have been doing.

In some instances, people relied entirely on informal networks for getting information about their deployment, communicating with those who had 'been there, done that' to help prepare them for their duty. This 'informal training' required initiative and being pro-active:

> As for the training side of it, obviously it was non existent almost. It was, basically what I got out of Puckapunyal, which is stories from the other guys of what to expect, what not to, .. but, coming from this unit and having all those guys from [ ] constantly around me - I wasn't ill prepared at all for it. So, just through talk through your mates and you understand where everyone is and what's going on.

> In my case there was a lot of help-yourself-training. I started liaising with the guy I was replacing and [did] a lot of reading. A lot of my job requires a lot of background so there was a lot of that self placed.

It is clear that informal networks play a significant role in pre-deployment training. It is important, therefore, that the existence of these networks is recognised, their role acknowledged and the co-existence between formal and informal systems facilitated. Moreover, the informal networks wealth of knowledge and potential should be leveraged and tapped into.

2.1.3 Skills and Composition of Teams

In contrast to the early MEAO deployments, where people formed units upon arrival to the area or shortly before, the AMTG was to train as a unit and deploy as a unit. This allowed for

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[8] Social learning is learning occurring within or by a cultural cluster that involves interaction between peers, genders, functional groups and ages, and across hierarchies and it happens in ways often not recognised as learning. (Warne, L. Ali, I. Pascoe, C. (2003) "*Social Learning and Knowledge Management - A Journey through the Australian Defence Organisation: the final report of the Enterprise Social Learning Architectures Task*", DSTO-RR-0257 AR 012 854, Defence Systems Analysis Division, DSTO Information Sciences Laboratories, South Australia.)

the development of relationships, which in turn, promoted trust amongst team members and their commanders (peer-to-peer, upwards and downwards) as well as knowledge about each other's strengths, weaknesses, and skill sets – all considered to be important elements for successful mission outcomes.

> *You got a feel for what your job was and it was just personalities you had to deal with but even then you knew what you were dealing with straight away, as soon as [you] walked into the room, so, in that aspect it was great. … The cohesion was what you'd expect. There weren't any training shortfalls in that aspect.*

The interview data suggest that the majority of interviewees deployed as a unit and had time to train together, although the amount of time varied

> *We initially found out that the deployment was coming up probably four months prior to going, or thereabouts. We were given around a six week period while we remained at our unit prior to actually being attached to [ ] who were leading the battle group for AMTG-X. During that six weeks, I was nominated as troop commander and in consultation with the OPSO of the unit we went through and decided who was going to deploy from the unit. … That left us with about a month to do mission specific training from our side of the house.*

> *… we were actually put into the four man teams that we would be in while overseas while here in Australia.*

> *… we did all our pre-deployment training as one big group*

The importance of getting teams together as soon as possible before deployment was emphasised over and over again in the interviews. Many saw it as the key to mission success. The time spent together gave them the opportunity to examine their own knowledge and skills, develop as a team, get to know the team, and learn the team's competencies and training backgrounds. A team is likely to be more cohesive when its structure favours close contact. Sundstrom's (1990) research found that, if the structure of a team allows for close working, as, for example, it does in a physically close group, then it produces better work than if the structure is loose and there is less contact. As one participant said:

> *I think they need to get the teams together a lot earlier than they do. They normally only have them together for a couple of weeks.*

As mentioned earlier, although it was expected that personnel would train and deploy as a unit, there were some instances where this was not the case and last-minute teaming and postings to the task group (in one case, within four days of deployment) took place. While unavoidable at times, this affected the team or individual's perceived ability to integrate and operate effectively. It was pointed out that 'last minute' joining was unfair and difficult for the individual, the commander, and the team as a whole, as illustrated by the following quotes:

> *… I came into the organisation at a late stage of the preparation, a position was made available. I missed out on a lot of the earlier troop and squadron lead-up training, so I came in at the sharp end*

and basically, a matter of one to two months prior to deploying I slotted in as the [ ], so ,I had to learn very quickly where I had to fit in, in the scheme of things,… I had to fit in. [And] developing those relationships with the soldiers and also the Troop Leader had to be sped up quite a lot.

Realistically, I can probably say the biggest detriment to our training is the first time that I had my troop complete together was when I set foot in Iraq.

When you've got members coming from other areas it makes it very difficult because they normally don't get in there until the last minute. They're thrown in, you're expected to teach these people and do the training altogether when there's no cohesion at all, it can make it very difficult. [For] the positions they have over [in the MEAO] normally they will tell you, "We need this, this and this type of person that can do these jobs". When you actually get over there, they have to do a lot more, and it can be very difficult.

Interviewees reported instances where the unit trained together and shortly before departure date, more than half of the personnel were told they were not going to be deployed. This seriously affected morale, not only of those who learned that they were not going, but also of those who proceeded with the deployment:

About 48 to 72 hours prior to deployment our team of 70 was cut back to 30, which had a very high [negative] morale effect on the 40 personnel that were dropped.

In addition to developing team cohesion, an important factor in achieving a successful mission outcome is team effectiveness. Team effectiveness is a function of many factors. One of these is the diversity of skills and personalities. This diversity, together with team members knowledge of each other's strengths and weaknesses, should allow for their strengths to be used in full, but it also allows members to compensate for each other's weaknesses so that different personality types balance and complement each other (Ali et al 2002; Warne et al 2003). Most of the interviewees indicated that the team they belonged to consisted of people of varying skills, ranks, and professional backgrounds:

The team itself was made up of a whole lot of different trades.

I guess it was the fact that so many people within the team were from so many different backgrounds, so many different trades, different ranks… I think it was that different knowledge, the different experiences, all that sort of thing that came together in the end. With all the different ideas of how we'd get things done and that's how we achieved it.

It is a lot easier because once you know each other and know their abilities then you can say, well, I can give him this job and I know he's going to do it well and I won't have to ask him about it - [i.e.] knowing how to allocate the jobs to people.

2.1.4   Pre-deployment Training and Briefings

In this section, specific aspects of pre-deployment preparation are discussed including the duration and specificity of such training.

2.1.4.1 Duration of Pre-deployment Training

Most of the interviewees commented on the length of the pre-deployment training, which, in full, was in the vicinity of four months. A large number of interviewees felt that it was excessive and it meant that the time away from families was considerably longer than expected. Moreover, the tempo during preparation and deployment was such that some people felt worn-out at the end of it. The following quote best illustrates this concern:

> *The amount of lead-up training we conduct and the time away from home in that lead-up training can be quite phenomenal, you know. Some trips - and talking from within the regiment we've had a few - you're looking at sort of a five-month lead-up training before you deploy on a six-months trip. And that's working, you know, six days a week, long hours. It's very draining on families because you're just never there.*

> *We were in Townsville for about two-and-a-half, three months, of lead-up training - of mission-specific lead-up training. Obviously we had some concerns there. The division were very good …. We were flown back to Brisbane each break we had. So I think most guys end up having three flights back home, which was excellent. [But] it turned a six-month trip into nine to 10 months.*

Despite this long lead-up training, generally, people felt appreciative of the training for contingencies that may arise while deployed.

> *So it was about probably three and a half months from when we found out we were going and we started training. I think for that reason a lot of guys felts like they'd been on deployment for three months by the time we got over there. I think it was a bit too long, but it was good and it was a good lead up and I mean there was nothing we weren't prepared for when we got there so I guess it worked in that respect.*

2.1.4.2 Specificity of Pre-deployment Training

Interviewees pointed out the pivotal role played by the Combat Training Centre. Through setting up mission rehearsal exercises, the Combat Training Centre facilitated whole battle group reflection and learning.

> *The Combat Training Centre basically set up all your mission rehearsal exercise and the like. It is working very well. It really allows a battle group or an organisation to critically reflect on what they're doing, set up as best they can in the mission they're going to be performing. So I think we have moved forward. They've been there for a while.*

Interviewees described in great length the extent of training they had undergone prior to deployment and the consensus was that it was sufficient for deployment readiness. People were particularly impressed with some of the scenarios and Mission Rehearsal Exercises (MRE) they went through.

> *We trained for that but not obviously as intensely as what we did on the MRE so I found that even though the MRE was geared at the high end, worst case scenario, war fighting, most horrible thing that could happen to us in Iraq, [it] only happened over a two day period but it paid off, it paid dividends and it worked well.*

However, the tempo and specificity of the MRE heightened expectations of the type of engagements to be conducted during deployment and many felt frustrated when, once deployed, they performed relatively simple duties:

> *The lead–up training is quite often harder than the job that you do there.*

> *The training that we did prior to going overseas I felt was very good for what we were doing but in saying that… due to the time frame of the exercise, something seemed to be happening all the time and that didn't really prepare us for getting over there and then the tempo would drop right off and a lot of soldiers believe that we've got to go straight into a war fighting situation and that wasn't the case*

> *…the restrictions placed on Australian soldiers who train very hard - [ ] spends more time in the bush training than almost any other unit apart from special forces, and then to send us over there and tell us we can't do anything, it's very frustrating.*

> *And we were doing a lot of extra training that probably shouldn't have really been in there.*

Although issues of cultural awareness were covered extensively during training, some expressed concern that the training focused mainly on the area of deployment and lacked an awareness of dealing effectively with coalition partners. These 'cultural' and doctrinal differences amongst coalition partners may severely impact on interoperability and the overall mission outcomes. This issue of 'cultural' differences was also of concern for the early MEAO interviewees (see HDoFW, 2007: Section 3.3.4).

> *…we did deal with Coalition forces …I don't think we were prepared for that side of it at all. Of course, when you do your training you're told about what's going on in the area that you're going to, what the people are like there, so the Coalition forces as such, you're not really told a lot about.*

Although not a majority experience, some interviewees pointed out the lack of some specific training, e.g. live fire training, somewhat compromised their deployment readiness, as illustrated by the following quote:

> *…the training for AMTG, specifically, for my organisation …was flawed just about in every way that we could look at it. I think this was mainly due to the fact that the mounting headquarters for that organisation was an infantry based organisation, so when it actually came time to do training that was valuable for us on the ground before we deployed, - it wasn't implemented. I'm not sure whether it was because the infantry headquarters hadn't planned for it or it wasn't a contingency they had looked at. Things like live firing. We did very, very limited live firing, mission specific live firing. When I say that I'm talking about getting the guys to be able to learn to shoot off the hip from the turret with both main armament, with coaxial machine gun, those sort of target practices, which is instinctive shooting, stuff that we don't do a lot of in Australia in a conventional sense. So we didn't do any of that sort of live firing, which I thought was a particularly valuable thing we should have done. And we basically only did a fire power*

demonstration, that was it, for the rest of the battle group. To me that was - flawed fatally, in my opinion.

While there was a general appreciation for the MRE, some interviewees felt their training was oriented more towards conventional warfare and the mission focused training was introduced too late into their training, as illustrated by the following quotes:

We concentrated a little bit too much on conventional warfare…trying to find the conventional enemy, instead of maybe concentrating on getting our skills sets together to a certain point where we could have stepped in a lot easier into the mission-specific stuff in Townsville. And I think we would have benefited much more if we'd concentrated on that. I mean, you get yourself to a certain level in conventional warfare, then you go and specialise.

We had so many new drivers, and even new crew commanders, [we needed to have] the crew commanders able to shoot and know how their weapon systems worked without having to think about it. We just didn't have the ability to do that because we were out doing conventional type training, where we should have been doing mission-specific stuff which related to live firing, driver training and that sort of stuff. So, definitely we needed, in my opinion, and we still should have mission focussed a lot earlier, especially in those areas.

CAL's findings also emphasise Mission Specific Training (MST) and suggest it is essential that MST is conducted for all elements of a deploying force in a collective format prior to deployment. This specific training provides an important opportunity to test force elements, develop and rehearse collective Standard Operating Procedures (SOP), and test mission essential equipment (Land Warfare Development Centre, 2008: A2).

2.1.5   Lessons Learned

During the interview program the majority of interviewees spoke of and felt very strongly about the need to implement lessons learned from their deployment and all other deployments that ADF personnel have been involved in. The lessons learned captured by this interview program resonate very much with lessons learned, analysed and compiled by CAL, however, CAL's analysis encompasses a much wider spectrum of operations (Land Warfare Development Centre, 2008).

Based on the analysis of the interview program these lessons learned can be grouped under several headings:

2.1.5.1   The Right Fit
As discussed in Sections 3.1.4.1 and 3.1.4.2, on duration and specificity of pre-deployment training, the lessons on these issues are:
- Length of pre-deployment training and preparation matters: pre-deployment training was perceived by the AMTG sample as too long.

- Content and specificity of pre-deployment preparation matters: pre-deployment training needs to be tailored to mission or to function.

- A balance between generic and specific training matters: the interviewees clearly indicated that this balance needs to be carefully planned.

- A balance between conventional warfare and mission specific training matters: in addition to mission specific training, it was suggested that some 'just in case' training is needed to cater for any eventualities that may arise during deployment. This type of training is not a substitute for mission specific training.

- Learning by doing is important: this type of learning was pointed out to be an effective way to train and hence the importance of scenario based training and mission rehearsal exercises.

- Previous experience counts: in order to avoid frustrating people and unnecessarily lengthening the time of pre-deployment training, it was emphasised that there is a need to build on previous experience, and not to duplicate it.

2.1.5.2 Training - Content and Staffing
- Cultural awareness is crucial for effective mission outcomes: similarly to the early MEAO interviewees, the AMTG interviewees also expressed a need for more cultural training / knowledge that includes a wide array of topics. These topics include : cultural awareness of other coalition forces, their doctrine and command philosophy; and host nation cultural awareness that goes beyond etiquette; language training / skills.
- 'First hand knowledge' important: need for more involvement of people who have returned from deployment.

2.1.5.3 Individual Training Needs
Although most of the lessons learned dealt with issues on a collective level, there were those that specifically focussed on an individual.
- Individual matters: need to structure pre-deployment training in such a way as to develop individual abilities to: act independently; be flexible / adaptable; and share information.
- Training for role at current rank and for higher (command) role crucial: in both sets of interviews it was reported that whilst deployed, people were performing duties at a higher rank, therefore, training "up" for higher duties and leadership roles was perceived as necessary.

2.1.5.4 Unit Training and Teaming
Morale, effective teams, and mission success seem to be interrelated. Effective team relationships were seen as very important and therefore lessons to be passed on are:
- Timing when teams are put together matters: assemble teams/units that will be working together while on deployment as early as possible to provide a venue to form relationships and to develop team cohesion.

- Early integration of different units important: integration between regiments and battalions and training with other units long before deployment was seen as very important.

2.2   Team Effectiveness

The issues discussed in the following sub-sections, although not necessarily the result of pre-deployment preparation, were reported as having an impact on overall team effectiveness.

2.2.1   Team Morale

Many factors influence troops' morale during deployment (HDoFW, 2007). One of these is the perception, by other forces, of one's reputation and contribution to the mission at hand. Whilst in the early MEAO interviews it was reported that the Australian troops were held in high esteem by their Coalition counterparts, some of the AMTG interviewees, especially at the PTE/NCO level, highlighted a sense of frustration at what they perceived to be a risk averse culture dictated from higher headquarters.

> *…other Coalition forces have this great picture of what Australian troops are like in their head due to the reputation left by Anzacs in the last couple of wars, then they go to work with us, and it's just changed a lot since then. It's just - yeah, so much pressure on gaining casualties and not to because someone might not get voted as PM if that happens.*

This, they felt, limited their ability to operate effectively and resulted in negative perceptions about the ADF among coalition partners, particularly those that had suffered casualties (e.g. US and Netherlands)

> *I mean, reputation - it feels as though like you kill a reputation when you go and work with countries like that who are losing people every day and you can't help due to the fact that, well, we can't get injured.*

> *I didn't actually have an American say this to me at all, but apparently we had a fairly poor reputation over there because we were very much doing our own little things and not really worrying about the bigger picture or anything like that.*

While these views were largely held by the lower ranks of coalition partners, it appears to have had impacted on morale. They felt that their work was not recognised by their operational counterparts.

> *The MRE for OBGW[9] was very intense. We were fired up, excited, expecting to go over there and really kick some arses, as the Yanks say, and we got there and did nothing, they wouldn't let us do anything - "You can't go down there because there was a bomb down there last week". We don't care. You know what I mean? But they won't let us.*

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[9]   Overwatch Battle Group West (OBGW) was previously known as the Al Muthanna Task Group

Another issue that impacted on troops' morale was the level of expectation. Several interviewees, particularly at the lower ranks (PTE/TPR, CPL and SGT), highlighted the differences in expectations and attitudes between those that regularly operated outside a firm base ('outside the wire') and those that remained within ('inside the wire'), which were difficult to reconcile and which caused tension. An example of this is a cavalry sub-unit maintaining an operational posture even when inside the firm base for the remainder of its deployment.

> *They just need to lay off, just relax the standards a bit just to make things go a little easier. If a soldier is teetering on the edge of having enough and all of a sudden he gets told to bloody have a haircut after two weeks or whatever, he's just going to go "Phoo" and then it's my job to get him back to where he should be.*

The tension between expectations of 'inside vs outside wire' mentality is highlighted by the following quote:

> *Now, this inside and outside the wire mentality I had to stop. There was no such thing as inside the wire. I had to get my troop to focus 100% on the operation and being in an operational sense. That was fine and that worked for us.*

2.2.2   Team Processes and Relationships

Group development generally follows a specific process. According to the Tuckman (1965) model while developing into a group, team members go through four distinct stages: Forming, Storming, Norming, and Performing. The progression from one stage to another is not necessarily linear and often teams vacillate between stages.

The forming stage is a learning period for all team members to find out about each other, the group functions and goals, and their individual roles within the group. As pointed out in Section 3.1.4, the interviewees felt that this stage of group formation was viewed as important for developing group cohesion.

The storming phase is characterised by conflict that may sometimes arise, over who has control, and establishing status / position of individual team members. It is during storming stage that personality and goal conflicts amongst team members become apparent.

Although this was not a prevailing issue, some of the interviewees related experiences where there were challenges to the working of the team. This problem was mainly due to some team members, who were on deployment before, behaving in a superior manner:

> *We had a lot of challenges to effectiveness, to be honest. You throw a group of guys together and it becomes very difficult - like it's always going to happen. We were in Iraq - and I have done the theory behind this - we were storming. We weren't doing the norming or the performing as far as team building is concerned. For the first three months that we were there, we were still trying to work out who was who within the troop. These are guys that have been over before, think that they know a lot about what they are doing, but it is still a different position that they're in.*

Norming, on the other hand, is a period when a team come to a consensus on what is acceptable and what is not. By that time goals, objectives, and expectations have been defined by the commander and the team members and the unique contribution of individual team members becomes apparent.

> *… and the other good thing was we were formed at the start of the year. We'd done conventional non-Iraq orientated activities and then melded into that and went over to Iraq as the same team. With a few minor changes here and there, but generally we were the same lot so we knew the characters, so you knew people's strong and weak points, what would set them off, what wouldn't. If things were wrong you could pick up on that very quickly and so that helped.*

The Performing stage is a peak in any team activity. During this stage there is a close bond between team members, relationships are secure, and the team acts as a cohesive unit. Generally speaking, the experiences of team work and team relationships shared by the interviewees were positive and people regarded their teams to be effective and innovative, as illustrated by this quote:

> *…and everybody sort of got along, because you always had a different story to tell and things like that. Just everybody - I can't think of any personality conflicts within the team, which is amazing for a team that big. I mean, everyone had their different opinions and everyone just said, "All right, well let's try this and if that doesn't work then we'll try this', or "Let's tape those two together and we'll try a bit of this and a bit of that", and no one was really like, "Look no, I don't like your idea". There was just nothing like that, everyone was just really well mannered*

An important element of team work success, and ultimately mission outcomes, is that all team efforts are directed towards the same clear goals (Hendrix, 1996; Kathzenbach & Smith, 1993). This relies heavily on good and open communication within (member to member, member to commander, commander to member) and across the teams, and on the harmony in member relationships. This open communication is a precursor for trust, which was seen as an essential element for team effectiveness. Team building activities and skills that foster trust are therefore critical for overall team effectiveness.

> *…tried as much as possible to integrate the various groups together or at least so that each area had a functional understanding of what their British counterparts did. We interacted with the British [ ] guys. Our guys would work pretty much next door to the British guys just so that you form that relationship. There were also a lot of encouraged sporting competitions between the Australians and the British and also combined teams, for that very reason.*

The interviewees pointed out that it is each member's responsibility to get along but it is up to a commander to recognise that different personalities, rather than complementing and balancing each other, may build up conflicts. There may be a lack of trust and openness that blocks critical communication and leads to loss of coordination of individual efforts.

> *Need to manage own and other personalities – especially commanders in a combined arms team where personal differences can make missions/patrols very difficult.*

These potential problems were often prevented by getting to know each other better through socialising in an atmosphere that encouraged open communication and honesty. By doing so, team members built trust and openness between each other.

That was identified by the commander at the time and he actually implemented a half day and a slower day for all ranks because people just would keep their nose to the grindstone the whole time. So you always teamed up - when you went to the gym you generally had a partner so when you work - it may have been one of your colleagues or whatever.

Communication. You know, if one bloke is struggling, he's a shy guy or anything like that, I put it onto my corporal to make him feel welcome and get the boys to show him what to do if he's lacking confidence.

A good sense of humour and sporting activities were often mentioned as binding teams together. Setting a time aside for relaxation, unwinding, and team building was also seen as very important:

We socialised on the [ ] as we went. That was our little team so we basically would entertain ourselves - jokes and a little bit of banter. It was quite good. We deliberately at 9.30 at night would go over there [to the British], take the group and invite as many as we possibly could to go over there just to unwind.

…and we were up there having a chit chat, you know, having a cigarette and then all of a sudden all these rounds went off and we all just hit the deck and we were like, "What the hell", and I was on the radio calling back saying, you know, this is what - what's going on blah, blah, blah. And afterwards, after we realised that there was nothing, we were all just sitting around having a laugh and the Captain was like, "Oh that was my first operational take cover", and we all just had a big laugh and it was hilarious because of that morale and…the way we all just got along it was just amazing.

Managing teams requires a leader who reflects on his/her role and has confidence in their own abilities to lead. Self-reflection is the process of examining the impact of personal values, beliefs, styles of communication, and experiences. This process develops a deeper understanding of one's culture, biases, experiences, and beliefs as these may influence future action and communication (Branson, 2007). The following quote well illustrates the characteristics of a leader who looks inwardly and examines their own role as a team leader:

It took me three months ... to work out where we were operating as a team. That was probably the hardest lesson that I've learned as an officer, to really have the confidence in myself to back my own decision, but not only that, really take charge of the group and really enforce my decisions and enforce the discipline where it needed to be enforced. Having said that, the guys that I had were so sort of battle orientated, were so field orientated that I could honestly tell you that from the first I was there, I had the most professional troop outside the wire that I think was in that task group.

The teams who knew each other well, either from previous deployments or working together, were perceived by the interviewees as good teams and that knowledge of each other that led to trust was seen as paramount on deployment. This issue was emphasised over and over again by the interview subjects and is also discussed in Section 3.1.4:

I don't think that those teams would be nearly as good as guys who have worked together previously. That said, rather than taking one troop who works together all the time, we did take four guys from one troop, five guys from another troop, but they were all from the same unit and they all knew each other. I think it's a bit concerning that we see so many ad hoc deployment mannings coming out now, when I think that the structure and the preplanning for deployments could be better done.

Unlike the early MEAO deployments, most of the interviewees said that in the instances where teams initially did not know each other, there was a time set aside to form teams and get to know each other before deployment:

The thing with our team of 30 people, we came from either 17 or 23 various units. There were only very few of us that had worked with each other before or knew each other previously. And so the initial seven to 10 days was actually forming a team out of it

One of the interviewees listed the elements that, in his opinion, contributed to an effective team:

- *an ability to look after each other*
- *camaraderie, good group morale*
- *a good sense of humour, relaxed outlook (additional pressures in terms of pickets, support patrols over and above their own work [that's] why one needed a sense of humour)*
- *adverse personalities detracted from team performance.*

Several interviewees commented positively on the learning culture that developed within their respective organisations during deployment, especially where honest mistakes were treated as learning experiences. Most of the interviewees were confident enough in their preparation and the relationships they had with their peers and commanders to be able to adapt to changing circumstances during deployment. For instance:

Initially, as you can imagine in the Army, you've got the rank structure so there were different ranks within the team and soon thrown out the window was the fact that, "Well hang on, I outrank you so, therefore, what I said goes", so team effort is the big one and having the ability to accept and throw around what someone has suggested.

...The way our soldiers in ordinance are - the way they learn things these days, they're not just streamlined any more right from the very beginning... As diggers now they can be put into lots of positions, and that was the difficult thing when we first got together… learning who had been in what positions. Some hadn't had very much experience at all, so there was a lot of learning that went on, a lot of questions and a lot of checking the manuals on the computer.

2.3   Summary

Generally speaking, interviewees were positive about the quality of training and preparation they received. However, in some cases, they felt that training and preparation could be better tailored. It was reported that the duration of pre-deployment training was considered to be too long and the mission specific training should have been introduced earlier into their

training. Informal networks were used extensively to obtain information about deployment. Interviewees pointed out the pivotal role played by the Combat Training Centre through setting up mission rehearsal exercises and facilitating whole battle group reflection.

The interviewees felt very strongly about the need to pass on the lessons learned from their pre-deployment training and these deal with the duration, specificity and content of training; use of previously deployed staff to conduct such training; necessity to address individual training needs for higher duties and leadership role that they often assume while on deployment.

The interview data suggest that the majority of interviewees deployed as a unit and had time to train together, although the amount of time varied. The time spent together gave them the opportunity to examine their own knowledge and skills, develop as a team, and learn the team's competencies and training backgrounds. Many reported a learning culture within their teams that supported innovation and learning from mistakes. Team building activities were used to foster trust, openness, and to overcome tension. Team morale seemed to have been affected predominantly by two factors: the perceived reputation of the ADF by coalition counterparts and the level of expectation experienced by those who mostly operated 'outside the wire'.

3. Comparison of AMTG Interview Program with the Early MEAO Interviews

A comparison of the sample from both sets of interview programs is depicted in Table 4.1. The early MEAO interview program included all three Services, the AMTG involved a smaller sample (30 versus 100 in the early MEAO) all of whom were Army personnel. Also, a narrower range of ranks (PTE/TPR to MAJ) in AMTG was represented, while in the early MEAO these ranks constituted 65% of the interview subjects. Another difference between the two interview programs is the percentage of NCOs in the respective samples. In the AMTG interview program NCOs constituted 43% of the overall sample, while in the early MEAO only 21%. This smaller sample and lesser representation of subjects of middle ranks was partially due to time constraints and the availability of interview subjects in that time frame. As in the previous interview program, the researchers tried to have both genders represented in the sample, with 10% of AMTG interviewees being female personnel, while in the early MEAO, 17% of the interviewees were female. Table 4.1 shows a comparison.

A direct comparison of the Army component from the early MEAO interview program with the AMTG interviews was not attempted for two reasons. Firstly, the aim of the early MEAO interview program was to gather ADF wide perspectives from the battlespace and the data was treated as such, to do a direct service-to-service comparison, would require re-analysing the early interview set. Secondly, although the sample information as depicted in Table 4.1, shows only a 10% difference in Army sample numbers, the demographic is considerably different. While ranks above MAJ constituted 33% of participants in the early MEAO interview program, these ranks were not represented at all in the AMTG sample. Another 33%

in the early MEAO sample were Majors while the same rank in the AMTG sample was represented by only 10% of interview participants.

Table 4.1 Comparison of interview sample between the early MEAO and AMTG

	ARMY				NAVY		RAAF		CIV
	Early MEAO		AMTG		Early MEAO		Early MEAO		Early MEAO
Rank equivalent	M	F	M	F	M	F	M	F	M
BRIG /CDRE / ACDRE	2				1				
COL / CAPT /GPCAPT	1				3		5	1	1
LTCOL / CMDR / WGCDR	8				8	1	3	1	
MAJ / LCDR / SQNLDR	10	1	3		7	2	6		
CAPT / LEUT / FLTLT	3	1	6	1	1	3	5	2	
LT / SBLT / FLGOFF			2				2	1	
WO1 / WO / WOFF	4			1	1				
WO2 / CPO / FSGT	2		2		1				
SGT / PO / SGT			4	1	1		3	1	
CPL / LS / CPL	1		5		1		2	1	
PTE / AB / LAC			5			2	1		
TOTAL	31	2	27	3	24	8	27	7	1
GRAND TOTAL	33		30		32		34		1

Specific coding of all the interviews facilitated a comparison between the two sets of interviews: the early MEAO deployment (2003-2004) and the AMTG interviews which took place in 2007. This comparison specifically focuses on the issues pertaining to pre-deployment training, preparation and team effectiveness.

The interview data from the AMTG indicates that the problems associated with uncertainty about roles, duties, and deployment locations which were identified by, and posed a big problem for, the early MEAO cohort were not as prevalent in the latter case. Instead, other issues with regard to pre-deployment preparation emerged. These were mainly in regard to the duration of training leading up to deployment which was seen by many interviewees as too lengthy and redundant for those who had done it previously leaving them feeling frustrated.

Although the consensus amongst the early MEAO interviewees was that the training covered a wide range of issues, it was considered to be too generic. Another issue that dominated that interview set was the lack of mission specific pre-deployment training (HDoFW, 2007: p12). In fact, one of the recommendations that resulted from the analysis of the early MEAO interviews was the need for designing pre-deployment training "to incorporate elements that are specific to the situation, posting, and location to which military personnel are to be deployed (whether peacekeeping or battlefield operations). To facilitate that, briefings by personnel who recently returned from deployment should be part of pre-deployment training" (HDoFW, 2007. p69).

In the case of the AMTG, pre-deployment preparation was reported to be mission oriented incorporating MREs. However, the interviewees felt that the mission specific training should

have been introduced much earlier into their training program. The data gathered suggest that, in both cases, interviewees utilised informal networks extensively to gather information about deployment and this information contributed to their ability to undertake their role more successfully. The involvement of those who had returned from deployment and were able to give 'first hand' information, in training, was highly regarded by interviewees.

In both interview sets, interviewees expressed a need for more cultural awareness and knowledge in relation to working within the coalition and, more specifically, working with the Americans. In particular, this cultural awareness should include information on command philosophy, skills and specialisation, and legal and doctrine issues (see also Section 3.1.4.2).

The issues in relation to team formation that emerged as prominent in the earlier set of interviews were: importance of knowing team members' skills, abilities, strengths and weaknesses, personal and competency based trust, and open communication. The aim of the AMTG was to train together in pre-formed units prior to deployment and by doing so the team issues that were reported as problematic with the early MEAO set should have been mitigated. Although not the norm, a few interviewees in the AMTG sample noted that they had been late stage or last minute inclusions to the deployment and had no access to, or very little, training before they were deployed and, therefore, less chance to develop a cohesive relationship with the team. Generally speaking, AMTG interviewees' experiences of team issues were positive and they commented on the learning conducive atmosphere within their teams. Further, many emphasised that when the team was able to get together before the deployment, whether in training or socially, the subsequent team work was more effective.

The comparison of concerns relating to pre-deployment training, preparation and team issues are summarised in Table 4.2.

Table 4.2 Comparison of AMTG interviews with the early MEAO set

Issues that emerged in relation to pre-deployment training and team dynamics	Early MEAO deployment (2003-2004)	AMTG deployment (2006-2007)	Trend between the two sets of interviews
Mission (understanding of aim/ objectives/ duties)	Often ambiguous, role uncertainty	Usually clear Commander's Intent, however some participants noted that they had deployed without clear mission statements / mission purposes	Improved
Deployment notice	Often very little notice	Usually good lead up time, although last minute inclusions to the deployment were reported	Improved

Pre-deployment training • Alignment of training to mission	Mostly generic (DFSU), generally speaking, lack of deployment specific training	Mostly satisfactory, MRE, scenario training, although some felt that pre-deployment training was more involved than the deployment itself. Suggested more emphasis on mission specific training much earlier into preparation	Greatly Improved
• Coverage / content	Mostly satisfactory. Suggestions for broader coverage included: legal issues, dealing with media, cultural awareness of other coalition forces and language training	Mostly satisfactory. Suggestions for more in-depth coverage included: cultural awareness of other coalition partners and cultural knowledge about host nation, language training	Good but improvement needed
• Length of pre deployment training	4-6 weeks	Up to 3 months, in many cases considered too long	Requires assessment
• Handovers	Regarded as very important, lengths ranged from a few hours to a week	Regarded as important, lengths ranged from a day to up to 2 weeks	Consistent
• Role of informal networks in pre-deployment info dissemination	Robust, widely relied on. Information from those who have done it before highly regarded	Robust, widely relied on. Information from those who have recently returned from deployment highly regarded and invaluable	Consistent but requires facilitation of informal networking
• Rating of importance of previous operational experience	High	High	Consistent
Unit /Team composition	Individual	Unit deployment,	Improved

	deployment or part of a Coalition/multi-Service team.	single Service and some multi-Service teams, predominantly defined team affiliation. Some 'last minute' deployment reported.	
Teaming issues • Team cohesion (based on interviewee perceptions of trust and goal alignment)	Minimal, teams assembled at the point of deployment	Usually good	Greatly improved
• Interviewee rating of importance of knowing your team members	High	High	Consistent but requires further facilitation
• Interview rating of Knowledge of team members' skills/competencies	Poor	Usually good	Improved
• Need for in-theatre training to update team skills	Prevalent	Not reported	Improved
• Socialising	Viewed as very important for relaxation and team building	Viewed as very important for relaxation and team building	Consistent
• Communication climate and learning culture	Was not overtly mentioned in these interviews	Mostly regarded as open and trusting communication climate that led to innovation and experimentation with ideas	Improved
• Human interoperability	Psychological, social, and organisational factors that underpin (or	Understanding of factors affecting human interoperability across Services and	Still an issue

	undermine) cooperation between Services and Coalition forces poorly understood.	Coalition requires improvement	

3.1   Enduring Themes from the Early MEAO and AMTG

Specific coding of all the interviews allowed for a comparison between the two sets of interviews. Over 20 coding terms and combinations of these terms were used to code the interviews. However, given the different rank structure of the two sets of interviews and the different operational tasks, some code terms did not feature significantly in the AMTG interview set, so these have been omitted from the comparison. Furthermore, the comparison is carried out within the framework of the research questions listed in Section 1.

Table 4.3 lists the code terms used for the comparison and determining the enduring themes. The percentages against a code term represent the combination of the code term 'Impediment' with the other codes listed. The percentage, therefore, represents the extent to which the interviewees felt that each of these issues was an impediment to them. While it is possible to conclude that many of these issues are seen to be enduring ones, this table should be interpreted cautiously, as it is clear from the interviews that while some Training and Preparation issues are still problematic, the nature of the problems has changed.

Table 4.3 HDoFW and AMTG interview Breakdown according to the code terms used

Degree to which issues were reported as impediment to achieving desired outcomes (%)		
Issue (by coding node)	HDoFW Interviews (2004-2005)	AMTG Interviews (2007)
Command	7.4	7.5
Cultural Aspects	6.3	6.3
Ethos	8.4	7.1
External Relationships	9.0	11.4
Fear and Direct Threat	10.0	6.7
Flexibility and adaptiveness	3.3	6.9
Information sharing	9.3	9.6
Morale	6.5	8.7
Preparation and Readiness	5.8	7.1
Relationships	6.8	6.8
Reputation	0.0	33.3
Technology	16.7	17.2
Tempo	4.8	7.7
Training and Skills	3.6	4.6
Workload	5.2	5.6

This table suggests the listed issues are enduring.

Based on the interview data, enduring themes in relation to:
Pre-deployment, are
- Widespread reliance on informal networks
- Strong emphasis on the need to engage those who returned from deployment in training of subsequent contingents
- Importance of mission specific training
- Importance of having cultural awareness of coalition partners' doctrine, rules of engagement (ROE), and command philosophy.

Team issues, are
- The need to assemble teams for deployment as early as possible
- Knowledge and trust of team member skills/abilities are seen as crucial (shared competencies)
- Flexibility and adaptiveness are rated as highly desired characteristics of team members, as well as the ability to execute and perform in a range of circumstances, having self confidence to act autonomously, and understanding purpose and consequences of one's actions were seen as important characteristics and skills of team members. Collectively, these attributes constitute professional mastery.
- The importance of clear articulation of commander's intent, (mixed or unclear messages from Command hierarchies and Headquarters) were reported to be a problem in both sets of interviews.

Other enduring issues are
- There appears to be a high level of performance, professionalism, adaptiveness, improvisation (making do with what's available to get a job done), and professional mastery amongst ADF personnel.
- Problems with information and communication technology equipment - suitability, performance, interoperability, and sufficient quantity.
- Problems with gathering, sharing and processing of information.

3.2   New Issues

A new issue that emerged in the AMTG interview program and is in contrast to the early MEAO interviews is the perceived reputation of the Australian soldiers by their coalition counterparts and by the Australian soldiers of themselves. As discussed in Section 3.2.1 and as depicted in Table 4.3, some interviewees sensed a negative perception amongst the coalition counterparts about the risk averse engagement of Australians. Whilst this issue was not the main subject of the interview program, it surfaced on a number of occasions during the AMTG interviews and a possible explanation for these perceptions was discussed earlier in this section. However, this is a new and concerning finding, and may be a medium to long-term post-deployment issue requiring further investigation or action.

The other issue that is worth highlighting as it appears to have impacted on morale is the level of, and differences in expectations and attitudes, between those that regularly operated

outside a firm base ('outside the wire') and those that remained within ('inside the wire'). The interviewees found these issues difficult to reconcile and they caused tension. Problems of that nature were not reported in the early MEAO interview program and it is possible that the differences in type of deployment as well as in the sample demographic between the two sets of interviews may account for this. However, this issue may be worth further investigation.

3.3   Summary

By comparison with the early MEAO interview program, the AMTG involved a smaller sample (30 versus 100 in the early MEAO) all of whom were Army personnel with NCOs comprising 43% of the overall sample (21%the early MEAO).

Based on the interview data, enduring themes in relation to pre-deployment pertain to mission specific training, reliance on informal networks, and cultural awareness in a wide sense including cultural awareness of coalition partners' doctrine, rules of engagement (ROE), and command philosophy. Enduring themes in relation to team issues are the timing for assembling of teams, issues around trust, and skills and attributes expected of team members, as well as a need for clear articulation of commander's intent. Pre-deployment notice, whilst an issue with the early MEAO sample, did not seem to be of concern to the AMTG interview participants.

Two new issues emerged in the AMTG interview program that are in contrast to the early MEAO interviews relate to the perceived reputation of the ADF and the level of, and differences in expectations and attitudes between those that regularly operated on patrol and those that remained within the base.

4. Conclusion

This document reports on the analysis of interviews with a sample of the Al Muthanna Task Group deployed over 2005-2006, with a focus on pre-deployment, preparation training, team dynamics and issues affecting team effectiveness. These findings are compared with the findings of the earlier MEAO Interview program, with a view to seeing if the AMTG training in pre-formed units has mitigated some of the earlier issues. It is important to point out in making conclusions, the differences in the tasking and demographic parameters in the sample. While both samples were stratified, the early MEAO interviews consisted predominantly of higher ranking officers. The AMTG sample, on the other hand, comprised predominantly NCOs. Furthermore, the AMTG's tasking involved mostly security and training operations, while the earlier interviewees' spectrum of duties was much wider. It is highly likely that perceptions of the interviewees would be influenced by these factors, as officers usually need to have a 'big picture' view of operations.

It is clear that training in pre-formed teams prior to deployment had mitigated some of the teaming issues reported from the earlier interview data set. The personal knowledge each team member had acquired of other members of the team was considered to be an important factor in teams conducting their mission effectively. This view was not a prevalent one in the

earlier interviews where teams were formed more on arrival in theatre and personnel did not have the benefit of knowing each other, let alone knowing each other's strengths and capabilities. However, on occasions, last-minute additions and transfers did occur in the AMTG which had the effect of unsettling the pre-formed teams.

In regard to pre-deployment preparation, while the same concerns that had dominated the earlier set of interviews did not appear to be prevalent in the AMTG interview data, other issues emerged. These issues affected warfighters morale and major annoyances include the duration of preparation training and the repetition of generic training for those that had done previous deployments to the same area of operations. Furthermore, there was concern about overtraining for situations that did not arise in the deployment, however, it was recognised that it is difficult to balance 'just-in-case' training against 'just-in-time' training.

In regard to the second research question, based on the data analysis, enduring issues in relation to pre-deployment preparation that require assessment are: content and coverage of pre-deployment to include legal, cultural, and media issues; and the overall length of pre-deployment training. In particular, there was a need for more in-depth cultural awareness of both host nation and other coalition militaries to be able to recognise and understand the effects of culture on people's values and behaviours. Another theme that is strongly emphasised in both sets of interviews and possibly needing formal recognition, is the role of informal networks in the gathering of information pre and during deployments.

There are two new issues that emerged from the AMTG analysis. One is the perceived negative reputation of the Australian soldiers by the coalition counterparts and by the Australian soldiers of themselves. The other issue is the level of, and differences in, expectations and attitudes between those that regularly operated outside a firm base ('outside the wire') and those that remained within ('inside the wire'). Both issues appeared to have impacted on troops' morale. Both of these are new findings, and may be medium to long-term post-deployment issues requiring further investigation or action.

This research explored, analysed and synthesised issues from the battlespace as perceived by the warfighters themselves. Based on the interview data it is quite clear that both deployments were characterised by a high level of performance, professionalism, adaptiveness and professional mastery by the ADF personnel involved. Many of the issues highlighted in this report correlate with those collected and reported by the Centre for Army Lessons. Australian NCW doctrine recognises the significance of the human dimension. This dimension highlights the importance of "high standards of training, the ability to cope with ambiguity, and the ability to make judgments that could have lethal consequences". It further emphasises that "people must be trained to deal with the increased demands that this networked environment will place upon their skills, competencies and physical and mental abilities" (Department of Defence, 2006: p9). By highlighting the issues associated with pre-deployment preparation, training and issues around team dynamics and composition, the researchers have contributed to the understanding of human dimension aspects of NCW and thus helped to better prepare ADF personnel for their key role. The results of this research have also input into the Human Dimension Model of Warfighters Perceptions of NCW which is reported on separately (see Pascoe et al, 2008). Training should not be static, and the nature of training and MREs needs to be consistently re-evaluated, as does the rotation structure to facilitate more overlap and

embedding of troops across different units, support for the building of personal networks and human interoperability issues in general.

The title of this report poses the question 'does team training make a difference'. The answer to this question is not a simple 'yes' or 'no'. The research data suggests that subsequent deployments did have an advantage in their preparation and training over the early MEAO contingent. However, the future operating environment requires a networked force where humans and technology integrate, and a collective approach to training to shift the mind-set from current to future operations. Therefore, to fully and meaningfully answer this question it would be necessary to study preparation and training for combat and non-combat operations at the collective force level, e.g. what is considered to be 'good practice' for collective training for future operations? While such study is outside the scope of this research task, this issue may prove to be worth pursuing in the future.

5. Recommendations and Further Research

While considering pre-deployment preparation and training, a possible model is to consider three probable functions of ADF personnel, regardless of Service affiliation and type of deployment, as; 'barrack' soldier, 'bush' soldier and leader. The 'barrack' soldier requires skills and competencies to do her/his task 'without thinking'; to intimately know their equipment and how to use it under any conditions, and to know the formal context of their performance - the doctrine, culture and values including formal C2 and the demands of rigid hierarchical rank. The 'bush' soldier needs to be able to apply her/his skills and knowledge effectively in non-peace situations, changing environments and different organisational arrangements. A 'bush' soldier needs to be flexible in terms of technical capability as well as in the social context, including the ability to deal with civil society and have a high level of cultural awareness encompassing host nation as well as other military forces and agencies. The emphasis here is on teaming, shared understanding and collaboration. Lastly, the soldier is also a leader, irrespective of rank. In the network environment soldiers at the lowest levels may be making key decisions linking sensor information to weapons employment. This implies that she/he needs to have knowledge of requirements above her/his rank and needs training in leadership skills.

The ability to operate in these different environments can be achieved through training and rehearsal, building and maintaining relationships, and experience in teaming including the development of strong personal networks, formal and informal. The challenge, therefore, is to translate these characteristics in a meaningful manner to apply them to individual teams, to formed units and to the collective force. The implications are that the nature of training involving equipment, tactics, techniques, procedures, and MRE needs to be re-examined in order to optimise the future force.

Recommendation: The nature of training and MREs should be examined so that they address the different roles that each individual soldier is likely to assume during deployments. This training should equip individual personnel with the skills and attributes required for higher duties and leadership roles.

While one cannot dispute the benefits of team members knowing each other, developing a shared social context, a feeling of trust and a human interest in each other, the notions of the networked organisation and network-centric operations will change the way teams operate. Therefore, the concept, preparation and working of a team need to be given more attention. In network operations, team members will be drawn from the same organisation/unit or from several different organisations/units. Team members will, more often than not, be unknown to each other and will not necessary work in physical proximity. During network-centric operations people will extensively rely on communication channels other than face-to-face. This paradigm necessitates a different approach to training and pre-deployment preparation for teams who will need to build trust and co-operate via the mediating technologies used for networked communication. It is necessary, therefore, that research into this area be carried out.

Recommendation: The network-centric paradigm necessitates a different approach to training and deployment preparation for teams who need to build trust and co-operate via the mediating technologies used for networked communication. While CONOPS for network-centric operations are being developed, concurrent research should be carried out into teaming issues in network-centric configurations. These different configurations will necessitate different understandings of teaming.

The focus of this report is on preparation for deployment and team effectiveness, but, as discussed in Section 2.2.1 (see also Appendix A and B), the spectrum of the interview program covered multiple topics. It is recommended that an analysis of the wider scope be carried out to cover areas such as command and control, working with the Americans, jointness, networker centric warfare, and context and communication. Such analysis will enable a full comparison between the early MEAO and AMTG interview programs and will help to identify areas requiring attention and where further research may be needed.

Recommendation: It is recommended that an analysis of the full range of topics covered in the AMTG interview program be carried out and the results be compared with those of the early MEAO interview program to identify areas requiring attention and where further research may be needed.

As pointed out in the concluding paragraph in the previous section, to fully and meaningfully answer the question whether team training makes a difference it would be necessary to evaluate collective training, its infrastructure and strategies to assist commanders and leaders at all levels in planning and conducting such training, e.g. what is considered to be 'good practice' for collective training so that individuals and groups acquire the attributes required of the future force.

Recommendation: It is recommended that a study on preparation and training at the collective level be carried out to determine what is considered to be 'good practice' for networked joint deployment readiness for a range of possible future operations.

6. Acknowledgements

7. Bibliography

Ali, I. M. Pascoe, C. and Warne, L. (2002) 'Yet Another Role for Team Building and Work Motivation - Enabler of Knowledge Creation and Knowledge Sharing', Proceedings of the *7th International Command and Control Research and Technology Symposium,* Québec City, 16-20 September 2002. Tracks/pdf/119.PDF, http://www.dodccrp.org/Activities/Symposia/7thICCRTS/

Branson, C. (2007) Effects of Structured Self-reflection on the Development of Authentic Leadership Practices among Queensland Primary School Principals, *Educational Management Administration & Leadership*, vol 35(2): 225-246.

Cross, R. and Parker, A. (2004) *The Hidden Power of Social Networks: understanding how work really gets done in organizations*, Harvard Business School Press, Boston

Department of Defence (2006) *Explaining Network Centric Warfare*, Defence Publishing Service, CP3-1-39, Canberra, A.C.T., 2600.

Ehin, C. (2004) *Hidden Assets: harnessing the power of informal networks*, Springer Science Business Media, N.Y.

HDoFW Team (2007) *The Transition from Network-Centric Warfare to Networker-Centric Warfare: outcomes of the Human Dimension of Future Warfighting Task* (Restricted Access). DSTO Report DSTO-CR-2007-0311, Defence Systems Analysis Division, Defence Science and Technology Organisation, Department of Defence, Edinburgh, S.A.

Hasan, H. and Warne, L. (2008) *Go*Team: Research, Train and Sustain - Human Dimensions of NCW sub-task report on the use of a microworld simulation*. DSTO Report DSTO-RR-0337, Joint Operations Division, Defence Science and Technology Organisation, Department of Defence, Edinburgh, S.A. (in processing).

Hendrix, G. (1996) 'The Importance of Goals to the Success of Work Teams'. University of North Texas, Denton, Texas. http://Internet.workteams.unt.edu/reports/ghendrix.htm (06/01/97)

Katzenbach, J. and Smith, D. (1993) 'The Discipline of Teams', *Harvard Business Review,* March-April 1993: 111-120.

Land Warfare Development Centre (2008), Pre-deployment Training Insights, Centre for Army Lessons, Tobruk Barracks, Puckapunyal. http://lwdc.sor.defence.gov.au/CALData/Lessons%20and%20Observations/CAL%20Reports/CAL%20Predeployment%20TRG%20Report_Apr08.doc

Pascoe, C., Warne, L. and Ali, I. (2008) *The Human Dimension Model of Warfighter's Perceptions of NCW: Synthesis of empirical findings - Human Dimensions of NCW sub-task report.* DSTO Report

DSTO-RR-xxxx, Joint Operations Division, Defence Science and Technology Organisation, Department of Defence, Edinburgh, S.A. (in processing).

Sundstrom, E. (1990), 'Work Teams: applications and effectiveness', *American Psychologist, vol 45(2):* 120-33.

Tuckman, Bruce W. (1965) 'Developmental Sequence in Small Groups', *Psychological Bulletin*, 63, 384-399. The article was reprinted in *Group Facilitation: a Research and Applications Journal* - Number 3, Spring 2001. Available as a Word document: http://dennislearningcenter.osu.edu/references/GROUP%20DEV%20ARTICLE.doc

Warne, L. Ali, I. and Pascoe, C (2003) 'Team Building as a Foundation for Knowledge Management: Findings from Research into Social Learning in the Australian Defence Organisation', *Journal of Information & Knowledge Management*, Vol. 2(2): 93-106.

Warne, L., Ali, I., Bopping, D., Hart, D. and C. Pascoe. (2004) *The Network Centric Warrior: The Human Dimension of Network Centric Warfare (U)* DSTO Report CR-0373, Defence Systems Analysis Division, ISL, Defence Science and Technology Organisation, Department of Defence, Edinburgh, S.A. (Approved for Public Release).

Appendix A: Supplementary Data Analysis

A.1. McIntosh: Themes from the AMTG Interviews

Independent Review of the NCW Human Dimensions Model by Amanda McIntosh

Approach
A small sample of the AMTG interview transcripts[10] were made available to undertake an independent review of the NCW Human Dimension Model. The approach I took was to read each interview individually, creating a Mindmap of the themes from the interview. Then, from the individual interview Mindmaps, I constructed a consolidated Mindmap to identify the themes and sub-themes of the group of interviews. A Mindmap showing these themes and sub-themes is at figure 1.

It was also a requirement of this review to identify deployment lessons learned as suggested by the content of the interviews. These have been categorised into the same themes and sub-themes identified in the thematic analysis and are discussed later in the Lesson Learned section.

Results
The top-level themes I identified were:
- Networks (which were broken down into Relationships and Information)
- Leadership
- Team
- Training
- Improvements or Issues
- Professional Mastery

A Mindmap showing these themes and related sub-themes is at figure 1.

Discussion
The independent review identified:
- In the sample there was little reference (maybe once or twice) to NCW by either the Interviewers or the Interviewees.
- The Interviewers did not explain as part of the interview preamble (or it was not transcribed) what the information being collected during the interviews would be used for.
- The purpose of the interviews has not been made clear[11]. It has been mentioned a few times that one of the purposes was to map the human dimension of NCW but it was never clear why this needed to be done or who asked for it to be done.

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[10]   The sample included 23 interview transcripts (but not the 7 interview summaries)
[11]   While it has been made very clear to me and in the focus groups what has been done with the data collected in the interviews (the model) and what the model might be used for,

Human Dimension Themes

Networks

- **Relationships**
  - With other services
  - With Coalition partners
  - With Locals
  - Formal Networks — Mainly used when there were problems or issues
  - Informal Networks — Very Important
  - Trust and Rapport is important to networks
  - Networks are a personal thing – based on the individual
  - Information Flows
    - Sometimes hard to form networks
    - Issues
      - Getting information from Canberra (rank based)
      - Rank Issues
      - Reliability of Sources
- **Information**
  - Types of information channels (eg. phone, DSN, email, internet, video, meetings etc)
  - Information sharing/flow – often an issue
    - Trust in
      - Source
      - Reliability
      - Knowledge of
    - Conflicting messages
    - Equipment
      - Lack of
      - Reliability (breakages due to heat, no power etc)
      - Connectivity (often lack of)
      - If no access to information or technology – people just make do
- **Team**
  - Individual attributes
  - What makes a good team
  - What is bad in a team (or is bad for a team)
- **Improvements & Issues**
  - Training
  - Socialisation of teams
  - Support at home (for returned troops and families during and after deployment)
    - Tempo (biggest issue for most)
    - Not enough information sharing
    - Better/Clearer guidance from Command and Heirarchy

Leadership

- Personality driven
- Information sharing (Issues)
- Interpersonal skills
- Leader attributes
- Getting it done
- Standing up for team
- Rank heavy
- Mixed or conflicting messages
- Hierarchy
  - Changed often
- Clear mission intent (usually)
- Lots of restrictions
- Decision Making
- Autonomy (whether they felt they had it or not)
- Command and Control lines
- Issues with

Training

- Types
- Issues
  - Too long
  - Not relevant
  - Not tailored to mission or people doing the training
- Positives
  - Talking to people returned from deployment often best source of information
  - Mission Readiness Exercise (MRE) usually praised
  - Too long away from families
- Timing
  - Training too long given length of deployment (eg 3 month training for a 6 month deployment)
  - No deployment notice

Professional Mastery

- Only talked about when Interviewer brought up – all answers provided different definition
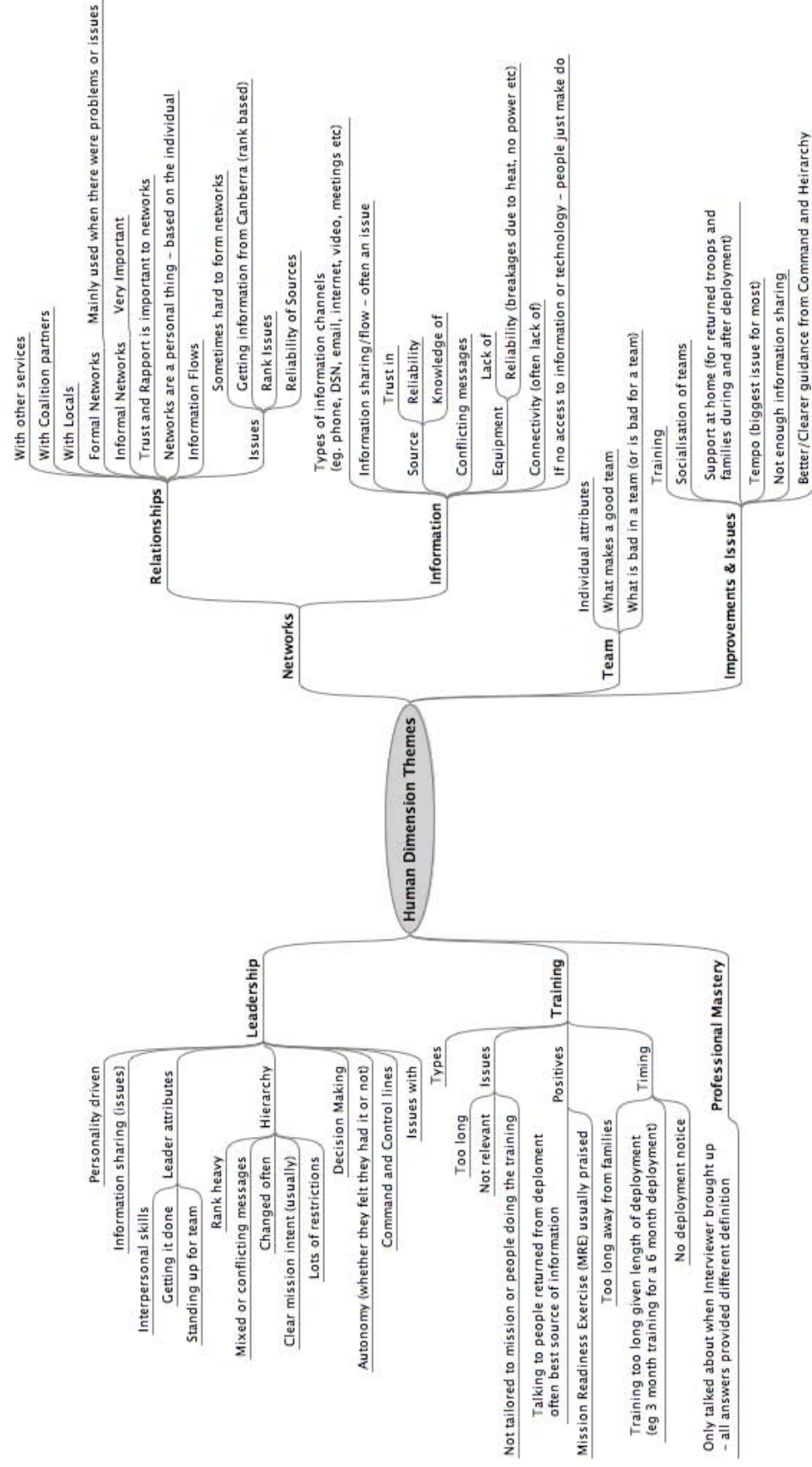
Figure 1 – ATMG Interviews – Human Dimension Themes and Sub-themes

This review identified similar themes as the NCW Human Dimensions Model. The smaller sample set for this review may have led to a limited perspective of the themes identified in the NCW Human Dimensions model.

Every interviewee spoke about the importance of relationship networks in undertaking their role successfully. The interviewees indicated that when things were going badly it was usually because the relationships within their immediate team, the command structure or with other units were inadequate. It was also noted by many interviewees that when there were problems with the technology or trouble getting information from the formal command structures, the informal networks they had established enabled them to still do the task or mission successfully.

Deployment Lessons Learned

The experiences of the interviewees in their deployments led to a number of suggestions for improvements and lessons learned for future deployments. These suggestions have been organised under the same themes and sub-themes that were identified in the Mindmap.

- Training
    o Many interviewees had concerns that training was often too long - people are away from their families for too long; training is often too long given the length of a deployment (an example was of 3 months of training for a 6 month deployment); and one interviewee made the point that he felt stale from too much training before getting in country.
    o Issues were raised about training not being tailored to the mission or the people attending; the training was often perceived as not relevant or something already done many times.
    o Suggestions were made that training could be made more up to date, tailored to the mission and the people attending and focused so it isn't too long.
    o A few interviewees noted that they had been late stage or last minute inclusions to the deployment and had not had access to any (or very little) training before they were deployed. A number of people suggested that less last minute deployments for individuals would be better for morale and families.
    o A number of interviewees noted that their previous training and experience was valuable – it allowed them to cope well in many unusual situations.
- Tempo
    o The high tempo of the ADF was something that almost all interviewees mentioned. Interviewees indicated that being so long away from their families is costing personal relationships. One interviewee noted that he had only been able to spend 2 weeks with his family over a 9 month period.
- Socialisation
    o An often mentioned lesson learned was that when the team was able to get together before the deployment (whether in training or socially) the team work was better in country and it made a huge improvement to deployments.
- Support
    o A number of interviewees suggested that spouses needed better support from the ADF while personnel were deployed and that returned personnel needed better support once back home from deployment. A number of interviewees also noted that though the policy was for them to have leave and training once home the high

tempo meant that people have often been sent straight to other deployments and exercises without rest periods.

- Information Sharing
  - o Many interviewees noted that information was not shared widely on deployments (though there were exceptions where interviewees noted how easy they were able to get the information they needed), it was noted that units didn't share information between each other and it was often difficult to get information up and down command chains.
  - o It was often noted that it was difficult to get information from Canberra or from the Australian Headquarters. Interviewees noted difficulties getting information from Canberra arising from a perception by the Canberra source that the deployed member didn't have a high enough rank to receive the information despite needing it to do the job.

- Technology
  - o Some interviewees noted a lack in technological equipment (mainly phones and computers) on base for personnel to use for personal reasons – to call home or email etc. One interviewee commented that they were able to ring home or email any time they liked but there were only 6 computers and 3 phones for 500 personnel.
  - o It was often noted that the environment (heat, lack of power, connectivity) often caused breakdown in equipment (mainly computers). One interviewee noted that the heat was a big problem and noted that the commercially bought off the shelf products always were more reliable than the Defence purpose built or Defence adjusted equipment was not suitable for the conditions.

- Command Lines / Leadership
  - o Many interviewees talked about having mixed or unclear messages from the Command hierarchies and the Headquarters. While there was usually a clear Commander's Intent, interviewees often noted that they felt they had deployed without clear mission statements or mission purposes. A number of interviewees noted that it was very hard to get strategic situational awareness from their Command.
  - o A number of interviewees brought up the issue of handovers, some interviewees felt they had too short handovers (sometimes less than a day) and some felt they had too long handovers (sometimes up to 2 weeks), it's suggested that a handover somewhere in between (a few days to a week) is the most beneficial length of handover.

A.2. Linger: Broad analysis of AMTG interview data

Analysis by Henry Linger

Overview:
Much of the material covered seemed to address three interrelated levels: the individual, the "element" (unit or functional area in barracks) and the "formed unit". Many of the issues were the same or similar but were expressed differently at different levels of analysis.

Analysis:
The main themes around which I have organised the analysis are identity, training, relationships, teaming and systems.

Theme – Identity
Individual
- professional pride
- competency
- belonging
- relationship within element
- shared responsibility

Element
- a strong sense of belonging
- us and them
- trust
  - hate them but can still trust their input
- knowing the members
- shared competencies
- mastery of function
- flexibility
- culture
  - history/tradition/function
  - equipment (how platforms used)

Formed unit
- lacked identity
  - in practical matters sacrifice element identify to achieve the unit goal
  - little effort to establish identity
- transient in nature
  - rotation structure
  - swapping out
- conflict/competition with elements
  - ignore element competencies
- C2
  - styles
  - personalities
  - flexibility
- lack of understanding of elements

Theme – Training
Individual
- Training needs to be broad
  - barrack soldier , bush soldier and leader
  - develop the individual to fit the team
  - ability to be independent
  - ability to be flexible
- "intangibles"
  - lateral thinking
  - communications and articulation
  - independence
  - info seeking
  - making mistakes
- function specific
  - rote (doing it instinctively)

- o technical
- training "up"
  - o for role at current rank AND for higher (command) role
  - o venues to form relationships
- training vs experience
  - o generic vs specific (mission/ops/theatre)

Element
- "the right fit"
- rotation structure
  - o handovers
  - o social learning
  - o experience
- knowing what you know
  - o working as a team
  - o knowing the team
  - o knowing the team competencies (training background)
- function specific
  - o barracks
  - o operations
  - o mission specific
- joint roles
  - o C2
  - o knowing the team (formed unit)
  - o training with team (formed unit) members
- working as a team
  - o risk taking
  - o colours
- training vs rehearsal

Formed unit
- C2
  - o personalities
  - o styles
  - o colours/functions (infantry/artillery/logistics/movement etc)
- rehearsal and training
  - o mission
  - o teaming
- collaboration
  - o the stock market metaphor
  - o shared understanding vs commander intent(directive)
- culture
  - o unit elements
  - o civil society
  - o colours/functions (infantry/artillery/logistics/movement etc)
- technical
  - o element capability
  - o how element deploys capability

Theme - Relationship
Individual

- surrounded by good people
- networks
    - thinking ahead
    - structure rotations and training to meet the "right" people
- make connections deliberately
    - within element/colours/coalition
    - meet and greet
    - face to face (f2f)
- learn the ropes
    - in theatre
    - in training
- identity
    - language
    - decision latitude
    - respect

Element
- matrix reporting
    - conflicting demands and loyalties
- formal networks
    - resolve disagreement
    - breakdown
- independence vs covering your arse
- personalities
- leadership
- trust
    - within element
    - within formed unit
    - within theatre
- getting the job done

Formed unit
- matrix reporting
- decision latitude
- language
- identity
    - trust
    - community
    - f2f
- rotation
    - integrating rotation (individuals, elements, AMTG)
    - overlaps
    - embedding
- independence of elements
- stock exchange metaphor
- lack of identity of unit
    - personalities
    - colour/function
- C2
    - personality

- o command intent
- o tasking
- doctrine
  - o flexibility
  - o environment
  - o elements

Theme – Teaming
Individual
- working independently and in a team
  - o decision latitude
  - o thinking ahead
- flexibility
- identity
  - o specialist
  - o technical
  - o pride
  - o respect
  - o function
- trust
  - o team
  - o CO, OC
  - o experience
- training is strength
  - o training for what
  - o with who
  - o building rapport
- C2
  - o expectation
  - o respect
  - o aspiration
  - o ability
- making connection
  - o f2f
  - o informal
  - o intersections between formal and informal
- experience

Element
- rehearsal and training
- connections
  - o surrounded by good people
  - o getting to know them
  - o rapport
- trust (down)
- trust (up)
- rank
  - o authority
  - o promotion
- experience

- o thinking ahead
- C2
- identity
    - o specialist
    - o pride
    - o respect
    - o function
- doctrine
    - o risk taking

Formed Unit
- C2
    - o command is the enemy
    - o command intent
    - o authority
    - o leadership
- experience
    - o risk taking
- lack of identity
    - o melting pot
- matrix reporting
    - o (non standard b/w units)
- knowing what you know
- mission specific
- experimentation
    - o "lets see if it works"
- rotation structure
- personalities

Theme - Systems
Individual/Element/Formed unit
- multiple channels
    - o technical
    - o formal
    - o informal
    - o f2f
    - o sources
    - o owners
- info load
    - o lack attenuators and amplifiers
    - o currency
    - o what do you believe
    - o why do you believe it
- experimentation
    - o "lets see if it works"
    - o improvisation
    - o bricolage
- info gathering
    - o reliance on "own" people
    - o correlating information and intelligence

- - - o   lack of involvement in transformation
        o   redundant info gathering
  - interpretation
  - experience
      - social
      - technical
  - memory
      - available
      - documented
      - useable ?
      - accessible ?
  - system use
      - in barracks
      - on mission
  - IT skills
  - intersection of informal and formal
      - action on informal makes it formal
      - backup/confirm informal with formal

Synthesis:
What emerges strongly from the interviews is the very high level of performance of the ADF within the constraints of rank and Service cultures. The most striking feature is the general mindset of personnel who seem to be very aware of the network centric characteristics of their deployment. What is impressive is that this mindset is embodied in how they conduct themselves and the characteristics of command they value. Personnel appear to be very motivated, well trained and display professional mastery. They are also capable of flexibility that allows them to adjust their mastery of their task to the requirements of the changed environment and organisation (physical and operational).

However the limitation appears to be a lack of ability to apply this mindset to the element and formed unit level. At these levels performance seems to be largely dictated by personalities, rank, doctrine and Service/unit/function cultures. What needs to be recognised is that these structural aspects will not change rapidly. The challenge therefore is to examine ways to implement a more network centric mindset at these levels. The diagram below is one attempt to address this dilemma.

The first aspect is to clearly articulate three modalities; barrack soldier, bush soldier and leader. The barrack soldier requires skills and competencies to do her task "without thinking"; to know intimately their equipment and how to use under any condition, and to know the formal context of their performance; the doctrine, culture and values including formal C2 and the demands of rigid hierarchical rank. The bush soldier needs to be able to apply her skills and knowledge effectively in non-peace situations, changed environments and different organisational arrangements. She needs to be flexible in terms of technical capability as well as the social context and this includes the ability to deal with civil society. The emphasis here is on teaming, shared understanding and collaboration. Lastly the soldier is also a leader, irrespective of rank. This implies that she needs to have knowledge of requirement above her rank and needs training in leadership skills.

These modalities are characterised through emphasis on training and rehearsal, relationship building and maintenance and experience in teaming including the development of strong personal networks, formal and informal.

The challenge therefore is to translate these characteristics and modalities in a meaningful manner to apply to elements and to formed units. The implications are that the nature of training and MRE needs to be re-examined, the rotation structure should be addressed to facilitate more overlap and embedding and support for personnel to form and maintain their networks.

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19. ABSTRACT

This document reports on the analysis of interviews with the Al Muthanna Task Group (AMTG), a battlegroup that formed Australia's main ground force contribution to the Multinational force in Iraq over 2005-2008. The report focuses on issues relating to training, pre-deployment preparation and teaming aspects of deployed units. AMTG findings in relation to those issues are compared with an earlier interview program which involved a representative sample of ADF (Australian Defence Force) personnel who had deployed to the Middle East Area of Operations over the period 2003-2005. The results of this analysis indicate that while some difficulties were not as prevalent, some had endured, and others had emerged. Enduring themes pertain to mission specific training, cultural awareness, and the timing for assembling of teams. New issues relate to the perceived reputation of the ADF and differences in expectations and attitudes between those that regularly operated on patrol and those that remained within the base.